

## REMARKS

Reexamination of the above-identified application is respectfully requested.

### The Office Action

The drawings were objected to under 37 CFR 1.83(a).

Claims 1-3, 9, 13, 14, and 18 stand rejected under 35 U.S.C. §102(b) as being anticipated by Ferenc (U.S. Patent No. 4,866,329).

Claims 4, 5, 10, 12, and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ferenc (U.S. Patent No. 4,866,329).

Claims 6 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ferenc (U.S. Patent No. 4,866,329) and further in view of Golz (U.S. Patent No. 5,683,175).

Claims 7, 8, 16, and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ferenc (U.S. Patent No. 4,866,329) and further in view of Martin, et al. (U.S. Patent No. 4,078,188).

Claims 11 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ferenc (U.S. Patent No. 4,866,329) and further in view of McBride, Jr., et al. (U.S. Patent No. 6,034,473).

### The Drawings

Applicants submit a proposed amendment to FIGURE 1 showing the height *h* of the lamp as the height of the lens plus reflector, as supported by the specification on page 5, lines 6-7. It will be seen that *h* extends about 6.6 cm, which is about half of *d* (about 13cm). It will be appreciated that an actual lamp may be proportionally larger or smaller. It is submitted that this drawing change provides support for claim 20 and adds no new matter. Accordingly, it is respectfully requested that the objections to the drawings be withdrawn.

### The Claims Distinguish over the References of Record

**Claim 1** has been amended and now recites a high brightness lamp which includes a concave reflector. An end cap is connected with a neck of the reflector. The end cap has a fitting for mounting the lamp to an electric socket whereby the lamp is supported from a ceiling. A light source is positioned within the reflector, with its major axis perpendicular to an axis of

the lamp passing through the end cap. A lens covers an open end of the reflector. The lamp emits light with a beam angle which is at least 45 degrees.

**Ferenc** makes no suggestion of such a lamp. Ferenc discloses a lamp for use as a warning light on the side of an emergency vehicle. The lamp of Ferenc is mounted to an opening in the wall of the emergency vehicle by fasteners (not shown), which are mounted in bores **30** of projections **22** spaced around the periphery of the lens **14** (Figs 5 and 7, col. 2, lines 44-47). There is no suggestion of mounting Ferenc's lamp to a ceiling by a standard electric socket. Ferenc shows no wiring, but it can be assumed that Ferenc's lamp is hard wired to electrical wiring of the vehicle. It is not intended to be replaced by a simple screw-in or bayonet type connection. The lamp of Ferenc could not be used in a garage or other facility without installing special wiring for the lamp and special mounting brackets. The lamp of Ferenc is thus unsuited to such applications.

The present applicants have developed a lamp which can be easily installed in a conventional electric socket without the need for additional mounting means and yet which achieves a high brightness, and extended lifetime with a low profile that is not found in conventional lamps. This is not shown in Ferenc, or in the other references cited against dependent claims 6 and 7-8. The lamp of **Golz** has an axially aligned lamp bulb **36**. Lenticules **12** are arranged to soften the image of the bulb. However, there is no suggestion of lenticules being used to create a wider beam, as the Examiner suggests, and nowhere is it suggested that a beam angle which is at least 45 degrees be generated. **Martin, et al.**'s lamp has an elongated tubular envelope **11**. There is no reflector or lens.

Accordingly, it is submitted that claim 1, and claims 2-10 dependent therefrom, distinguish patentably and unobviously over the references of record.

With respect to dependent claim 2, Ferenc makes no suggestion of a beam angle of at least 55 degrees.

With respect to dependent claim 8, the Examiner suggests that Martin, et al. teaches running a lamp at a voltage higher than that for which it was designed. However, Martin teaches that it is detrimental to run a lamp at higher than the rated voltage, even when the voltage is applied in short bursts. Thus, Martin teaches against running a lamp at 10% above its rated voltage.

**Claim 11** has been amended to recite a high brightness lamp having an end cap connected with a reflector for supporting the lamp from a ceiling socket, the end cap extending from the reflector along the axis of the lamp. A light source is positioned between a focal point of the reflector and the lens. The lamp emits light with a beam angle which is at least 45 degrees.

Amendments to claim 11 are supported by the specification as filed, at page 1, lines 8-9, page 4, lines 10-18, and Figure 1.

None of the references of record, alone or in combination, discloses such a lamp. The lamp of **Ferenc** does not have an end cap connected with a reflector for supporting the lamp from a ceiling socket. Nor does Ferenc's lamp have an end cap which extends from the reflector along the axis of the lamp. In the lamp of **McBride**, the bulb is oriented along the axis of the lamp. Moreover, there is no motivation for combining McBride with Ferenc. McBride's object is to concentrate the emission of light along and about the central axis of the filament (abstract). For an ellipsoidal lamp, McBride positions the bulb behind the focal point, i.e., between the focal point and the reflector and for a parabolic lamp, in front of the focal point. There is no suggestion in McBride of creating a beam angle of 45 degrees or more.

Accordingly, it is submitted that claim 11 distinguishes patentably and unobviously over the references of record.

**Claim 12** has been amended to incorporate subject matter of original claim 13 and now recites a method of producing a high brightness beam of light having a wide beam angle. The method includes positioning a light source of a lamp between a focal point of a reflector and a lens, energizing the light source, and reflecting the light from the reflector. The reflector has a ratio of diameter to length along an axis of symmetry of the lamp which is from about 2.5:1 to about 3.5:1. The light is passed through a lens to increase a beam angle of the light. The lamp emits a beam of light with a beam angle which is at least 45 degrees.

The references of record do not suggest such a method. As the Examiner acknowledges, **Ferenc** does not disclose a ratio of diameter to length along an axis of symmetry of the lamp which is from about 2.5:1 to about 3.5:1. Nor does Ferenc disclose positioning a light source of a lamp between a focal point of a reflector and a lens. **McBride** makes no suggestion of positioning a light source of a lamp between a focal point of a reflector and a lens for a lamp with a ratio of 2.5:1 to about 3.5:1. Rather, for an ellipsoidal lamp, McBride positions the bulb behind the focal point, i.e., between the focal point and the reflector. Further, there is no suggestion in McBride of a lamp emitting a beam of light with a beam angle which is at least 45 degrees. Rather, McBride teaches against a wide beam angle, and instead, concentrates the beam along the axis.

Accordingly, it is submitted that claim 12 and claims 14-18 dependent therefrom, distinguish over the references of record.

**Claim 20** has been amended and now recites a method of producing a high brightness beam of light having a wide beam angle from an overhead lamp. The method includes attaching the lamp by a fixture to an electrical socket in a ceiling such that the lamp extends from the

fixture by a distance which is about half that of a maximum diameter of the lamp. Light from a reflector of the lamp is reflected. The reflector has a ratio of diameter to length along an axis of symmetry of the lamp which is from about 2.5:1 to about 3.5:1.

The reference of record does not disclose such a method. Ferenc's lamp is attached to a side of an emergency vehicle. It is not attached to a ceiling by a fixture. There is no suggestion of providing a fixture on Ferenc's lamp which would allow it to be mounted to a conventional electrical socket in a ceiling. Rather, Ferenc's lamp has to be mounted from behind a wall, such that it is flush with the wall. This would be inconvenient if not impossible to use in any garage or similar setting.

Accordingly, it is submitted that claim 20 distinguishes patentably over the reference of record.

### CONCLUSION

For the reasons set forth above, it is submitted that claims 1-12, 14-18 and 20 distinguish patentably over the references of record. An early allowance of these claims is earnestly solicited.

Respectfully submitted,

**FAY, SHARPE, FAGAN,  
MINNICH & McKEE, LLP**

June 18, 2003  
Date

Ann M. Skerry  
Ann M. Skerry, Reg. No. 45,655  
1100 Superior Avenue  
Seventh Floor  
Cleveland, Ohio 44114-2518  
216/861-5582